

ABSTRACT OF THE DISCLOSURE

Fiber reinforced recycled thermoplastic composites and methods for their manufacture are presented. In a preferred embodiment, the thermoplastic composite incorporates a matrix of recycled thermoplastic and a plurality of high modulus, reinforcing fibers, with the recycled thermoplastic including polyethylene, polypropylene, nylon, PET and styrene-butadiene rubber, and the reinforcing fibers including glass fibers, natural fibers, carbon fibers, and aramid fibers. Preferably, each of the reinforcing fibers has a minimum length of approximately 1/2 of an inch and a modulus of approximately one million psi.